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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,501	09/12/2003	Shing-Jy Shyu		5637

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TROXELL LAW OFFICE PLLC
5205 LEESBURG PIKE
SUITE 1404
FALLS CHURCH, VA 22041

EXAMINER

CHORBAJI, MONZER R

ART UNIT	PAPER NUMBER
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1744

MAIL DATE	DELIVERY MODE
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06/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/660,501	Applicant(s) SHYU, SHING-JY	
	Examiner MONZER R. CHORBAJI	Art Unit 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This non-final action is in response to the RCE/amendment received on 05/14/2007

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bucher et al (U.S.P.N. 5,302,083) in view of Van Norman (U.S.P.N. 4,831,505), Laurel (U.S.P.N. 4,402,649) and Eisenhardt, Jr. (U.S.P.N. 4,422,824).

Bucher discloses a ceiling fan (for example, see figure 4) that includes the following: an upper cover (figure 4:12), a driver (the unlabeled electrical wiring in figure 4 that is located on top of the upper cover 12 is the driver capable upon being connected and disconnected to a power source by a user to activate and deactivate the light tube 18. Note that the specification on page 4, numbered lines 11-14 states that the driver is to actuate the light tube) located on top of the upper cover that actuates the

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ray light tube (figure 4:18), a lower cover (figure 4:14), a controller having a cord controllable switch (figure 4:28 and 30), a motor (figure 4:24) located between the upper cover and the lower cover, the controller controlling the motor (figure 4:32), a securing annular plate (figure 4:16) located between the upper cover (figure 4:12) and the lower cover (figure 4:14), the plate (figure 4:16) includes a protruding piece protruding inwardly (figure 4:86) toward the motor (figure 4:24), the plate (figure 4:16) includes a groove located on each of the top and the bottom (figure 4:74 and 76) where an outer periphery of the upper cover is inserted into the groove located on the top of the plate (figure 4:70) and an outer periphery of the lower cover is inserted into the groove located on the bottom of the plate (figure 4:72), a light ray tube (figure 4:18) surrounding the motor and is located between the upper cover and the lower covers (figure 4:12, 14 and 18), a light ray tube controller (figure 4:96) that is capable of controlling the brightness of the light ray tube (figure 4:18), a plurality of screws (unlabeled screws in figure 4) connecting the upper cover (figure 4:12) to the lower cover (figure 4:14) where the screws are inserted through the screw holes of both the upper and lower covers and a plurality of fan blades (figure 4:26) controlled by the motor (col.4, lines 1-5) where the lower cover (figure 4:14) and the ray light tube (figure 4:18) are located above the fan blades (figure 4:26). Bucher does not specifically teach the following: having plurality of inwardly protruding pieces where each of the pieces has a protruding piece screw hole, plurality of hook rings, having a cold cathode ray light tube and where the upper and lower covers are made of UV protective material. Van Norman discloses a ceiling fan (figure 1:10) that includes a fluorescent light (figure 2:44) supported with a plurality of

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inwardly protruding tube holding brackets (figure 2:42 and 46) where each of the brackets has a protruding piece screw hole (figure 2:48 and 38) for securing the fluorescent light in a certain position (Van Norman, col.2, lines 14-20 and lines 52-53). Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to further add Van Norman holding brackets to Bucher's ray light tube in order to insure that the ray light tube of Bucher is additionally secured in a certain spatial position within the ceiling fan as taught by Van Norman (col.2, lines 14-20 and lines 52-53).

Van Norman does not specifically teach the following: plurality of hook rings, having a cold cathode ray light tube and where the upper and lower covers are made of UV protective material. Laurel discloses a ceiling fan (figure 1:10) that includes a fluorescent light tube (figure 1:40) supported with a plurality of hook rings (figure 3:76) in order to properly position the light tube within the ceiling fan housing (Laurel, col.2, lines 31-36). Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to further add Laurel hook rings to Bucher's ray light tube in order to properly position the light tube within the ceiling fan housing as taught by Laurel (col.2, lines 31-36).

Laurel does not specifically teach having a cold cathode ray light tube and where the upper and lower covers are made of UV protective material. Eisenhardt's ceiling fan (see figure 1) has cold cathode ray light tubes (figure 1:19) in order to destroy 99% of the microorganisms contaminating indoor air (col.1, lines 65-68 and col.2, lines 1-2). Furthermore, Eisenhardt teaches that UV is harmful to human eyes (col.2, lines 65-68

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and col.3, lines 1-4) and places baffles made of material that prevents UV light from spreading outside of the interior of the volume of the fan blade (col.1, lines 56-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute Bucher's ray light tube with a cold cathode ray light tube as taught by Eisenhardt in order to destroy 99% of the microorganisms contaminating indoor air (Eisenhardt, col.1, lines 65-68 and col.2, lines 1-2) and to further modify the construction material of Bucher upper and lower covers by incorporating material that confines UV light within a certain space as taught by Eisenhardt so that UV rays harmful to humans is prevented from escaping to the areas outside the lamp assembly (Eisenhardt, col.2, lines 66-68).

Response to Arguments

4. Applicant's arguments with respect to claim 2 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R. CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 9:00-5:30.

6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GLADYS J. CORCORAN can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRC



GLADYS JP CORCORAN
SUPERVISORY PATENT EXAMINER